STATEMENT OF LEGAL AND FACTUAL BASIS

Yokohama Tire Corporation
Salem, Virginia
Permit No. VA-20123
Permit Date: June 2, 2003
AIRS ID No. 51-161-0026

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Yokohama Tire Corporation has applied for a Title V Operating Permit for its Roanoke City facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

FACILITY INFORMATION

Permittee	Facility
Yokohama Tire Corporation 1500 Indiana Street Salem, Virginia 24153-0648	Yokohama Tire Corporation, Salem Plant 1500 Indiana Street Salem, Virginia 24153-0648

Prepared By:

Date: June 2, 2003

SOURCE DESCRIPTION

SIC Code: 3011 - Establishments primarily engaged in manufacturing pneumatic casings (rubber tires), inner tubes, and solid and cushion tires for all types of vehicles, airplanes, farm equipment and children's vehicles; tiring; camelback; and tire repair and retreading materials.

The facility receives raw materials at the plant. Raw materials are blended to make the black and white rubber used to make the tire components. Steel and cloth are coated with rubber to make belts. The tire parts are assembled to form the "green tires". The green tires are sprayed inside

and outside with lubricants which allow the rubber to flow and keeps the tire from sticking to the molds. The sprayed green tires are then loaded into curing presses where they are heated under pressure. The curing process forms the tread on the tire and cures the rubber to form the completed tire. Sidewall buffing is required of whitewall tires, the black protective strip is removed from the whitewall tires and a blue protective coating is sprayed on to the white rubber. The tires then proceed to the tire uniformity optimizers where they are selectively ground to ensure proper force balance.

The facility is permitted for the operation of three boilers. Boiler #3 designated FB-B3 in the application is permitted and has requirements that satisfy the state existing source rules. Boilers #4 and #5 (#5 not yet constructed) are affected facilities per NSPS Subpart Dc. The new source conditions and NSPS requirements meet the existing source requirements of the state regulations.

The manufacturing operations at the plant are affected facilities per NSPS Subpart BBB, and several of these operations have specific emission requirements that must be met. Yokohama uses design and performance testing of the capture system in combination with a 95% destruction efficiency on their incinerator as the method of compliance with the NSPS requirements. The Commonwealth of Virginia has an existing source standard for the rubber tire manufacturing industry. The permit is more stringent than the existing source standard in its overall capture and control of VOC, 88.2% in the permit versus the 85% requirement in the existing source standard.

The Yokohama Salem plant currently produces radial passenger pneumatic tires and radial light truck pneumatic tires. The facility is permitted to produce 40,000 tires per day, and has a production limit of 14,600,000 tires per year. The facility also has a Facility wide VOC emissions cap of 210.0 tons per year.

The facility is a Title V major source of VOC, Total HAP's and Hexane. This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility was previously permitted under a minor NSR Permit issued on August 6, 1999.

COMPLIANCE STATUS

The facility is inspected 2 times per year and is currently considered to be in compliance. A signed consent order exists for the facility. The consent order includes a Supplemental Environmental Plan which requires research into reducing VOC emissions from the tread end cement process. All other requirements have been met. This SEP is not addressed by this permit.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following :

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
FB-B3		Cleaver Brooks DL-60-E	$55.1x10^6$ btu/hr	--	--	--	8/6/1999 Permit
FB-B4		ABCO Industries 90101	$79.4x10^6$ btu/hr	--	--	--	8/6/1999 Permit
FB-B5		ABCO Industries 90101	$79.4x10^6$ btu/hr	--	--	--	8/6/1999 Permit
Division 100 (Mixing & Storage)							
1-BM		Internal mixers # 1 to 7	1,667 tires/hr	Baghouse	--	TSP & PM_{10}	8/6/1999 Permit
Division 200 (Extrusion & Calendering)							
2-WMILL		Warm-up mills	1,667 tires/hr	--	--	--	8/6/1999 Permit
2-EX	E401	Extruders nos. 1 to 7	1,667 tires/hr	--	--	--	8/6/1999 Permit
2-CAL		Calenders nos. 1 & 2	1,667 tires/hr	--	--	--	8/6/1999 Permit
2-TEND	E401	Treadend cementers nos. 1 to 3	1,667 tires/hr	Incinerator	FB-INC2	VOC	8/6/1999 Permit
Division 300 (Stock Preparation)							
3-BDIP	E401	Bead dip	300 tires/hr	Incinerator	FB-INC2	VOC	8/6/1999 Permit
Division 400 (Tire Building)							
4-TB	E401	Tire building machines # 1 to 125	1,667 tires/hr	--	--	--	8/6/1999 Permit
Division 500 (Green Tire Spray & Curing)							
5-GTS	E401	Green tire sprayers # 1 to 8	1,667 tires/hr	Incinerator	FB-INC2	VOC	8/6/1999 Permit
5-CP		Curing presses # 1 to 206	1,667 tires/hr				8/6/1999 Permit
Division 600 (Tire Uniformity Optimizers & Finishing)							
6-TUO		Tire uniformity optimizers #1 to 23	--	Baghouse	--	TSP & PM_{10}	8/6/1999 Permit
6-SWBF		Sidewall buffers # 1 to 14	--	Baghouse	--	TSP & PM_{10}	8/6/1999 Permit
Division 700 (Cement House)							
7-CH		Cement house	--	Incinerator	FB-INC2	VOC	8/6/1999 Permit

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

EMISSIONS INVENTORY

A copy of the permit application emission calculations for 1997 throughputs is attached as Attachment A.

EMISSION UNIT APPLICABLE REQUIREMENTS

The plant is divided up into seven divisions, numbered 100 through 700, in increments of 100. The permit was arranged generally by each division, except where requirements covered several different divisions; in these cases, the requirements were either moved to the facility wide section or repeated in each applicable section for the equipment it covered.

During preparation of the Title V permit, several typographical errors were found in the 8/6/1999 permit and amendment. The errors were citations referencing other permit condition numbers. The errors will be fixed by administrative permit amendment in the near future. The correct references have been cited in the Title V permit.

Limitations

Particulate emissions from the Internal mixers shall be controlled by baghouses.
(9 VAC 5-80-10 H, 9 VAC 5-50-260 & Condition 4 of 8/6/1999 Permit)

Particulate emissions from the tire uniformity optimizers and sidewall buffers shall be controlled by a baghouse. The baghouse shall be provided with adequate access for inspection and equipped with a device to continuously measure the differential pressure drop across the baghouse.
(9 VAC 5-80-10 H, 9 VAC 5-50-260 & Condition 5 of 8/6/1999 Permit)

Boiler emissions shall be controlled by proper operation and maintenance.
(9 VAC 5-170-160 & Condition 6 of 8/6/1999 Permit)

VOC emissions from tread end cementers and outside green tire sprays shall be controlled by incineration.
(9 VAC 5-80-10 H, 9 VAC 5-50-260 & Condition 7 of 8/6/1999 Permit)

VOC emissions from the cement house shall be controlled by incineration.
(9 VAC 5-80-10 H, 9 VAC 5-50-260 & Condition 8 of 8/6/1999 Permit)

VOC emissions from the bead dip operation shall be controlled by incineration.
(9 VAC 5-80-10 H, 9 VAC 5-50-260 & Condition 9 of 8/6/1999 Permit)

The nominal operating temperature for all new incinerators shall be at least 1500 ^{o}F, -50 ^{o}F.
(9 VAC 5-50-50 & Condition 11 of 8/6/1999 Permit)

The bead dip operation shall process no more than 36,000 tires per month.
(9 VAC 5-80-10 H & Condition 15 of 8/6/1999 Permit)

The tread end cementing operations shall consume no more than 15,872 gallons of cement per month.
(9 VAC 5-80-10 H & Condition 16 of 8/6/1999 Permit)

The tire building operation shall consume no more than 496 gallons of solvent per month.
(9 VAC 5-80-10 H & Condition 17 of 8/6/1999 Permit)

The inside green tire spray units shall process only sprays containing 12% or less, by weight, of VOC as sprayed.
(9 VAC 5-50-400 & Condition 18 of 8/6/1999 Permit)

The green tire spray units shall consume no more than 46,624 gallons of outside green tire spray per month.
(9 VAC 5-80-10 H & Condition 19 of 8/6/1999 Permit)

The calender operations shall process no more than 5,190,000 pounds of rubber per month and no more than 63,145,000 pounds of rubber per year, calculated monthly as the sum of the last consecutive 12 month period.
(9 VAC 5-80-10 H & Condition 22 of 8/6/1999 Permit)

The warm-up mills shall process no more than 10,730,250 pounds of rubber per month and no more than 130,551,375 pounds of rubber per year, calculated monthly as the sum of the last consecutive 12 month period.
(9 VAC 5-80-10 H & Condition 23 of 8/6/1999 Permit)

The curing presses shall process no more than 20,158,350 pounds of rubber per month and no more than 245,259,766 pounds of rubber per year, calculated monthly as the sum of the last consecutive 12 month period.
(9 VAC 5-80-10 H & Condition 24 of 8/6/1999 Permit)

The tire uniformity optimizers shall grind no more than 120,000 tires per month and no more than 1,460,000 tires per year, calculated monthly as the sum of the last consecutive 12 month period.
(9 VAC 5-80-10 H & Condition 25 of 8/6/1999 Permit)

The approved fuels for boilers No. 3, No. 4, and No. 5 are natural gas and distillate oil. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-10 H & Condition 26 of 8/6/1999 Permit)

The No. 3 boiler shall consume no more than 486.0 x 10^6 cubic feet of natural gas and 3,219,300 gallons of distillate oil per year, calculated monthly as the sum of the last consecutive 12 month period.
(9 VAC 5-80-10 H & Condition 27 of 8/6/1999 Permit)

The No. 4 and No. 5 boilers combined shall consume no more than 662.4 x 10^6 cubic feet of natural gas and 1,753,235 gallons of distillate oil per year, calculated monthly as the sum of the last consecutive 12 month period.
(9 VAC 5-80-10 H & Condition 28 of 8/6/1999 Permit)

The maximum sulfur content of the oil to be burned in the No. 3, No. 4, and No. 5 boilers shall not exceed 0.2 percent by weight per shipment. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil.
(9 VAC 5-170-160, 9 VAC 5-50-410 & Condition 29 of 8/6/1999 Permit)

The exhaust stack for boiler No. 3 shall be at least 20 meters above ground level.
(9 VAC 5-80-10 H & Condition 32 of 8/6/1999 Permit)

The exhaust stacks for boilers No. 4 and No. 5 shall be at least 25 meters above ground level.
(9 VAC 5-80-10 H & Condition 33 of 8/6/1999 Permit)

Emissions from the operation of the No. 3 boiler shall not exceed the limits specified below:

Total Suspended Particulate	0.78 lbs/hr	3.22 tons/yr
PM-10	0.39 lbs/hr	1.61 tons/yr
Sulfur Dioxide	11.1 lbs/hr	45.7 tons/yr
Nitrogen Oxides (as NO_2)	7.78 lbs/hr	32.2 tons/yr
Carbon Monoxide	1.95 lbs/hr	8.05 tons/yr
Volatile Organic Compounds	0.09 lbs/hr	0.39 tons/yr

(9 VAC 5-50-260 & Condition 34 of 8/6/1999 Permit)

Individual emissions from the operation of the No. 4 or No. 5 boiler shall not exceed the hourly limits specified below. Combined emissions from the two boilers shall not exceed the annual emissions limit specified below:

Total Suspended Particulate	1.17 lbs/hr	1.75 tons/yr
PM-10	0.58 lbs/hr	0.88 tons/yr
Sulfur Dioxide	16.6 lbs/hr	24.9 tons/yr
Nitrogen Oxides (as NO_2)	11.9 lbs/hr	17.9 tons/yr
Carbon Monoxide	13.0 lbs/hr	19.5 tons/yr

Volatile Organic Compounds	0.12 lbs/hr	0.18 tons/yr

(9 VAC 5-50-260 & Condition 35 of 8/6/1999 Permit)

Total emissions from the operation of the Internal mixers nos. 1 through 7 shall not exceed the limits specified below. Hourly particulate emissions limits are based on the maximum expected hourly emission factor. Annual emissions limits are based on an average emission factor.

Total Suspended Particulate	3.01 lbs/hr	13.15 tons/yr
PM-10	1.55 lbs/hr	6.80 tons/yr
Volatile Organic Compounds	13.67 lbs/hr	14.30 tons/yr

(9 VAC 5-50-260 & Condition 37 of 8/6/1999 Permit)

Emissions from the operation of the baghouses controlling the Internal mixers and milling operations shall not exceed the limits specified below. Hourly particulate emissions limits are based on the maximum expected hourly emission factor. Annual emissions limits are based on an average emission factor.

Total Suspended Particulate	0.84 lbs/hr	3.68 tons/yr
PM-10	0.51 lbs/hr	2.22 tons/yr

(9 VAC 5-50-260 & Condition 38 of 8/6/1999 Permit)

Emissions from the operation of the warm-up mills shall not exceed the limits specified below:

Volatile Organic Compounds	10.62 lbs/hr	11.49 tons/yr

(9 VAC 5-50-260 & Condition 39 of 8/6/1999 Permit)

Emissions from the operation of the calenders nos. 1 and 2 shall not exceed the limits specified below:

Volatile Organic Compounds	3.05 lbs/hr	3.35 tons/yr

(9 VAC 5-50-260 & Condition 40 of 8/6/1999 Permit)

Emissions from the operation of the extruders nos. 1 - 7 shall not exceed the limits specified below:

Volatile Organic Compounds	2.12 lbs/hr	2.17 tons/yr

(9 VAC 5-50-260 & Condition 41 of 8/6/1999 Permit)

Total emissions from the bead dip operation shall not exceed the limits specified below:

Volatile Organic	0.31 lbs/hr	1.34 tons/yr

Compounds		

(9 VAC 5-50-260 & Condition 42 of 8/6/1999 Permit)

Total emissions from the operation of the tread end cementers shall not exceed the limits specified below:

Volatile Organic Compounds	3.49 lbs/hr	15.28 tons/yr

(9 VAC 5-50-260 & Condition 43 of 8/6/1999 Permit)

Total emissions from the tire building operation shall not exceed the limits specified below:

Volatile Organic Compounds	2.29 lbs/hr	10.04 tons/yr

(9 VAC 5-50-260 & Condition 44 of 8/6/1999 Permit)

Total emissions from the operation of the green tire sprays shall not exceed the limits specified below. Hourly particulate emissions limits are based on the maximum expected hourly emission factor. Annual emissions limits are based on an average emission factor.

Total Suspended Particulate	0.73 lbs/hr	2.30 tons/yr
PM-10	0.73 lbs/hr	2.30 tons/yr
Volatile Organic Compounds	20.08 lbs/hr	87.95 tons/yr

(9 VAC 5-50-260 & Condition 45 of 8/6/1999 Permit)

Total emissions from the operation of the curing presses (Lines A through J) shall not exceed the limits specified below. Hourly VOC emissions limits are based on the maximum expected hourly emission factor. Annual VOC emissions limits are based on an average emission factor.

Total Suspended Particulate	23.09 lbs/hr	78.61 tons/yr
PM-10	19.82 lbs/hr	64.34 tons/yr
Volatile Organic Compounds	10.15 lbs/hr	29.13 tons/yr

(9 VAC 5-50-260 & Condition 46 of 8/6/1999 Permit)

Emissions from the operation of the sidewall buffers shall not exceed the limits specified below. Hourly particulate emissions limits are based on the maximum expected hourly emission factor. Annual emissions limits are based on an average emission factor.

Total Suspended Particulate	1.21 lbs/hr	5.32 tons/yr
Volatile Organic Compounds	0.89 lbs/hr	3.89 tons/yr

(9 VAC 5-50-260 & Condition 47 of 8/6/1999 Permit)

Emissions from the operation of the baghouses on the sidewall buffers shall not exceed the limits specified below. Hourly particulate emissions limits are based on the maximum expected hourly emission factor. Annual emissions limits are based on an average emission factor.

Total Suspended Particulate	0.60 lbs/hr	2.64 tons/yr

(9 VAC 5-50-260, 9 VAC 5-80-110 & Condition 48 of 8/6/1999 Permit)

Emissions from the operation of the tire uniformity optimizers shall not exceed the limits specified below. Hourly particulate emissions limits are based on the maximum expected hourly emission factor. Annual emissions limits are based on an average emission factor.

Total Suspended Particulate	0.24 lbs/hr	1.06 tons/yr

(9 VAC 5-50-260 & Condition 49 of 8/6/1999 Permit)

Emissions from the operation of the baghouses on the tire uniformity optimizers shall not exceed the limits specified below. Hourly particulate emissions limits are based on the maximum expected hourly emission factor. Annual emissions limits are based on an average emission factor.

Total Suspended Particulate	0.12 lbs/hr	0.53 tons/yr
PM-10	0.06 lbs/hr	0.26 tons/yr

(9 VAC 5-50-260 & Condition 50 of 8/6/1999 Permit)

Emissions from the operation of the cement house shall not exceed the limits specified below:

Volatile Organic Compounds	1.54 lbs/hr	6.75 tons/yr

(9 VAC 5-50-260, 9 VAC 5-80-110 & Condition 51 of 8/6/1999 Permit)

Visible emissions from the boiler stacks shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity.
(9 VAC 5-50-260, 9 VAC 5-50-20 & Condition 53 of 8/6/1999 Permit)

Visible emissions from the roof exhausts in the curing press area shall not exceed five percent opacity.
(9 VAC 5-50-260, 9 VAC 5-50-20 & Condition 54 of 8/6/1999 Permit)

Visible emissions from the baghouses shall not exceed 5 percent opacity.
(9 VAC 5-50-260, 9 VAC 5-50-20 & Condition 55 of 8/6/1999 Permit)

The yearly production of tires shall not exceed 14,600,000 tires.
(9 VAC 5-80-10 & Condition 68 of 8/6/1999 Permit)

Yokohama Tire Corporation shall maintain a preventive maintenance plan for the control equipment at the plant.
(9 VAC 5-80-10, 9 VAC 5-50-400 & Condition 70 of 8/6/1999 Permit)

Yokohama Tire Corporation shall comply with the preventive maintenance plan listed in Condition 74 as approved by the Department.
(9 VAC 5-80-10, 9 VAC 5-50-400 & Condition 71 of 8/6/1999 Permit)

All tread end cementers, new and green tire sprays shall be constructed and operated in accordance with all requirements listed in 40 CFR Part 60 - Standards of Performance for New Stationary Sources, Subpart BBB - Standards of Performance for the Rubber Tire Manufacturing Industry.
(9 VAC 5-50-400 & Condition 72 of 8/6/1999 Permit)

Boilers No. 4 and No. 5 shall be constructed and operated in accordance with all requirements listed in 40 CFR Part 60 - Standards of Performance for New Stationary Sources, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.
(9 VAC 5-50-400 & Condition 73 of 8/6/1999 Permit)

Monitoring (see also Facility Wide Conditions)

For each tread end cementing operation, Yokohama Tire Corporation shall use the procedure listed in 40 CFR Part 60, Subpart BBB, Section 60.543 to determine compliance with the emission limit.
(9 VAC 5-80-10, 9 VAC 5-50-410 & Condition 63 of 8/6/1999 Permit)

Recordkeeping - (See also Facility Wide Requirements)

Testing - (See also Facility Wide Requirements)

Initial performance tests for phased construction, emission tests for PM-10 and total suspended particulate emissions from the baghouses controlling the internal mixers shall be conducted. At the same time, opacity tests, in accordance with 40 CFR, Part 60, Appendix A, Method 9, shall also be conducted on the baghouses.
(9 VAC 5-50-30, 9 VAC 5-80-10 J, Condition 59 of 8/6/1999 Permit & Condition 56 of 8/6/1999 Permit)

Initial performance test, emission tests for NO_x from the #5 boiler shall be conducted. At the same time, opacity tests, in accordance with 40 CFR, Part 60, Appendix A, Method 9, shall also be conducted on the boiler.
(9 VAC 5-50-30, 9 VAC 5-80-10, Condition 60 of 8/6/1999 Permit & Condition 57 of 8/6/1999 Permit)

Reporting - (See also Facility Wide Requirements)

The permittee shall submit fuel quality reports to the Director, West Central Regional Office within 30 days after the end of each calendar quarter. If no shipments of distillate oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no oil was received during the calendar quarter. If distillate oil was received during the calendar quarter the reports shall include:
(9 VAC 5-80-10, 9 VAC 5-50-50 & Condition 30 of 8/6/1999 Permit)

For boiler No. 5, the permittee shall furnish written notification to the Department, (Director, West Central Regional Office) of:

- The actual date on which construction of the boiler commenced within 10 days after such date,
- the anticipated start-up date of the boiler postmarked not more than 60 days nor less than 30 days prior to such date,
- the actual start-up date of the boiler within 10 days after such date, and
- the anticipated date of the performance tests of the boiler postmarked at least 30 days prior to such date.

(9 VAC 5-50-50, 9 VAC 5-50-400 & Condition 78 of 8/6/1999 Permit)

The notification required in Condition 82 shall include:

-The design heat input capacity of the boilers and identification of fuels to be combusted.
-The annual capacity factor at which Yokohama Tire Corporation anticipates operating the boilers based on all fuels fired and based on each individual fuel fired.
-Notification that an emerging technology will not be used for controlling SO_2 emissions.

(9 VAC 5-50-50, 9 VAC 5-50-400 & Condition 79 of 8/6/1999 Permit)

FACILITY WIDE CONDITIONS

Limitations

Facility-wide VOC emissions from the tire manufacturing facility shall not exceed the limits specified below:

Volatile Organic Compounds	210.0 tons/yr

(9 VAC 5-80-1700, 9 VAC 5-170-160 & Condition 36 of 8/6/1999 Permit)

Combined emissions from the operation of the incinerators controlling the cementers, green tire sprays, bead dipping operation, and cement house shall not exceed the limits specified below. Hourly particulate emissions limits are based on the maximum expected hourly emission factor. Annual emissions limits are based on an average emission factor.

Total Suspended Particulate	5.43 lbs/hr	23.79 tons/yr

PM-10	5.43 lbs/hr	23.79 tons/yr
Nitrogen Oxides (as NO_2)	0.46 lbs/hr	2.03 tons/yr
Volatile Organic Compounds	23.48 lbs/hr	102.9 tons/yr

(9 VAC 5-50-260 & Condition 52 of 8/6/1999 Permit)

Based on the results of the stack testing required by conditions 56, 57, 58, 59, 60 and 63, Yokohama Tire Corporation shall demonstrate to the satisfaction of the Department of Air Pollution Control that the emission limits in this permit are not exceeded. If the stack testing fails to show compliance with the permitted emission levels, Yokohama Tire Corporation shall reduce production to a level at which the emission limits are not exceeded.
(9 VAC 5-80-10 & Condition 64 of 8/6/1999 Permit)

All captured VOC shall be ducted to an incinerator which is operated on a continuous basis. The incinerator shall have a destruction efficiency of at least 95.0 percent and an overall reduction efficiency of at least 88.2 percent shall be achieved, as determined by 40 CFR Part 60, Subpart BBB, Section 60.543.
(9 VAC 5-50-260, 9 VAC 5-50-400 & Condition 65 of 8/6/1999 Permit)

The Yokohama Tire Corporation shall continue research and development for eliminating VOC's from the outside spray for the green tires. Yokohama Tire Corporation shall update the Department on the progress of this research at least once per year and shall implement the water based outside sprays when it is technologically and economically feasible to do so. This change may require a permit.
(9 VAC 5-50-260 & Condition 74 of 8/6/1999 Permit)

Monitoring

Yokohama Tire Corporation shall install, calibrate, maintain, and operate according to manufacturer's specification, temperature monitoring devices equipped with a continuous recorder for the temperature of the gas stream in the combustion zone of the incinerators. The temperature monitoring devices shall have an accuracy of 1 percent of the temperature being measured.
(9 VAC 5-50-50, 9 VAC 5-50-400 & Condition 10 of 8/6/1999 Permit)

The incinerators shall be equipped with indicators of the current supplied to the fan motor. The ductwork, baghouses, and cyclones shall be inspected from the outside each week for leaks. Pressure drop on the baghouses shall be monitored and recorded daily. Any necessary maintenance shall be done in a timely fashion.
(9 VAC 5-50-20 E & Condition 13 of 8/6/1999 Permit)

Compliance with the emission limits in the permit are through calculation of emissions. The

accuracy of the calculations are supported by proper operation and maintenance of the control equipment. Recordkeeping of production through various stages in the process, and limits on production support the emissions limits in the permit and are a demonstration of compliance.

Additional monitoring includes; weekly observations of emissions from stacks, which trigger Method 9 or corrective action add additional periodic monitoring and demonstrations of compliance with the opacity limits contained in the permit.

Recordkeeping

The permittee shall retain records of maintenance to the cyclones, baghouses, incinerators, and ductwork. The records shall include diagrams which show the specific location of filter media which have failed since the last overall replacement of filter media.
(9 VAC 5-50-50 & Condition 14 of 8/6/1999 Permit)

Yokohama Tire Corporation shall maintain continuous records of the temperature in the combustion zone of the incinerators and records of all 3-hour periods of operation for which the average temperature of the gas stream in the combustion zone was more than 28 ^{o}C (50 ^{o}F) below the combustion zone temperature measured during the most recent determination of the destruction efficiency of the thermal incinerators that demonstrated compliance.
(9 VAC 5-80-10, 9 VAC 5-50-260, 9 VAC 5-50-400 & Condition 66 of 8/6/1999 Permit)

The permittee shall retain records of all fuel information, emission data and operating parameters required, to include process throughputs, by the terms of this permit. The content of and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to: the monthly throughput of natural gas and the daily throughput distillate oil for each boiler; the monthly throughput of natural gas for each incinerator; all fuel supplier certifications; monthly usage of bead dip, cements, green tire sprays, thinners and tire building solvent; records of maintenance performed on control equipment or ductwork. These records shall be available on site for inspection by the Department and shall be current for the most recent 5 years.
(9 VAC 5-50-50, 9 VAC 5-50-400 & Condition 82 of 8/6/1999 Permit)

Testing

Initial performance test, emission tests for PM-10 and total VOC from the incinerators shall be conducted for each new treadend cementer, green tire spray, cement house, and reactivation of the bead dip operation The performance test shall also determine control device efficiency and overall VOC reduction efficiency for the existing tread end cementers and green tire sprays that are connected to the incinerator.
(9 VAC 5-50-30, 9 VAC 5-80-10 J, Condition 60 of 8/6/1999 Permit & Condition 58 of 8/6/1999 Permit)

Yokohama Tire Corporation shall repeat performance tests on the affected incinerators, cementing operations, and green tire spray operations when directed by the DEQ, EPA or when Yokohama Tire Corporation elects to operate the capture system or control device at conditions different from the most recent determination of overall reduction efficiency for the tread end cementers or the most recent determination of control device efficiency, measurement of capture system retention time, or measurement of face velocity for the green tire sprays.
(9 VAC 5-50-30, 9 VAC 5-80-10 J, 40 CFR 60.543 & Condition 61 of 8/6/1999 Permit)

The permitted facility shall be designed and constructed to allow emissions testing using appropriate methods upon reasonable notice at any time.
(9 VAC 5-50-30 & Condition 81 of 8/6/1999 Permit)

Reporting (see specific process requirements and General Conditions)

The following data shall be included in the report for each of the performance tests required by Conditions 60 and 63

- The emission control device efficiency (E), the capture system efficiency (F_c), the face velocity through each permanent opening in the capture system with the temporary openings closed, and the overall system emission reduction (R).
- Yokohama Tire Corporation shall include in the initial compliance report a statement specifying, in detail, how each of the equipment design and performance specifications has been met for new or replacement green tire sprays. The initial compliance report also shall include the following data: The emission control device efficiency (E), the face velocity through each permanent enclosure opening with all temporary enclosure openings closed, the total area of all permanent enclosure openings, the total area of all temporary enclosure openings, the maximum solvent use rate (kg/hr), the type(s) of VOC used, the lower explosive limit (LEL) for each VOC used, and the length of time each component is enclosed after application of cement or spray material.
- The average combustion temperature measured at least every 15 minutes and averaged over the performance test period of incinerator destruction efficiency for each thermal incinerator.

(9 VAC 5-50-30, 9 VAC 5-60-30 & Condition 62 of 8/6/1999 Permit)

Yokohama Tire Corporation shall maintain the weekly tire production rate and the monthly usage of bead dip, tread end cement, thinner, solvent used in tire building, inside green tire spray, and outside green tire spray. Yokohama shall submit a report of these numbers on a quarterly basis to the Director, West Central Regional Office. The report shall also include a list of each 3-hour period of operation for which the average temperature of the gas stream in the combustion zone of any of the thermal incinerators, as measured by the temperature monitoring device, is more than 28^{o}C (50^{o}F) below the combustion zone temperature measured during the most recent determination of the destruction efficiency of the thermal incinerator that demonstrated that the affected facility was in compliance. The first report will be due within thirty days of the end of the first calendar quarter in which construction begins.

(9 VAC 5-80-10 & Condition 67 of 8/6/1999 Permit)

Quarterly reports on the progress of construction shall be submitted to the Department (Director, West Central Regional Office).
(9 VAC 5-50-50 & Condition 76 of 8/6/1999 Permit)

For the new or replacement cementers and green tire sprays, the permittee shall furnish written notification to the Department (Director, West Central Regional Office) of:

-The actual date on which construction of the expansion commenced within 30 days after such date.

-The anticipated start-up date of each cementer or green tire spray postmarked not more than 60 days nor less than 30 days prior to such date. The notification for new or replacement green tire sprays shall include the following:

--A written report declaring for each green tire spraying operation the emission limit Yokohama Tire Corporation intends to comply with and the compliance method to be employed.

--A specification of the monthly schedule (each calendar month or a 4-4-5 week schedule) to be used in making compliance determinations.

-The actual start-up date of each cementer or green tire spray within 15 days after such date.

-The anticipated date of stack emission tests of the cementer or green tire spray postmarked at least 30 days prior to such date.

(9 VAC 5-50-50, 9 VAC 5-50-400 & Condition 77 of 8/6/1999 Permit)

For the remainder of the new or modified equipment included in the expansion, the permittee shall furnish written notification to the Department (Director, West Central Regional Office) of:

-The actual date on which construction of the expansion commenced within 30 days after such date.

-The anticipated start-up date of each expansion phase postmarked not more than 60 days nor less than 30 days prior to such date.

-The actual start-up date of each phase of the expansion within 15 days after such date.

-The anticipated date of stack emission tests postmarked at least 30 days prior to such date.

(9 VAC 5-50-50 & Condition 80 of 8/6/1999 Permit)

ALTERNATE OPERATING SCENARIOS - NA.

STREAMLINED REQUIREMENTS

Conditions 1 & 2 of the 8/6/1999 permit include a listing of application dates and an equipment list for the facility, respectively. These conditions are not applicable to the Title V permit program and have been streamlined out of the Title V permit.

The under tread and sidewall cementing operations shall be removed. Reactivation of either of these operations may require a permit.

(9 VAC 5-80-10 & Condition 3 of 8/6/1999 Permit.)
Operations have been removed and this condition streamlined out of the Title V permit.

The label gluing operation has been shut down by Yokohama Tire Corporation but has not been identified as such in any permits to date, or by mutual shutdown. A statement that the operation has been shutdown has been included in this permit, therefore requirements to maintain records of label glue usage and subsequent reporting of those numbers has been removed from the Title V permit as obsolete.

Condition 32 of 8/6/1999 Permit prohibited boiler #4 and boiler #5 from operation until the stack height of boiler #3 was raised. The stack height has been raised to the appropriate height so the obsolete wording has been streamlined out of the requirement and the prohibition on operation of boiler #4 and boiler #5 has been removed.

NSPS Subpart Dc requires fuel sulfur limit of 0.5%. This requirement is streamlined out of the Title V as the current state permit requires a fuel oil sulfur limit of 0.2%.

Condition 69 of 8/6/1999 Permit addresses non-criteria pollutants listed in an attachment to the permit as being exempt from state toxic regulation or in compliance with the regulation. The condition is streamlined out of the Title V permit as being obsolete. Condition 69 was deleted from the NSR permit during the last amendment with the creation of a State Only section of the NSR permit. State toxic requirements are no longer federally enforceable and do not appear in the Title V permit.

Conditions 57, 60, 78 & 79 address testing and reporting requirements for FB-B4 and FB-B5 (Boiler #4 and Boiler #5). References to FB-B4 have been removed from the Title V permit as obsolete. Construction and testing have been completed on FB-B4. Condition 79 had incorrect citation. The Conditions 78 & 79 have been combined in the Title V permit, eliminating the need for the reference.

Conditions 70, 71, 86 & 87 of the 8/6/1999 permit address preventative maintenance, minimization of emissions through maintenance and a spare parts inventory, proper operation and training of equipment operators. These conditions have been streamlined and combined for the purposes of the Title V permit into the Facility Wide Conditions of the permit, and/or restated in each applicable process section of the Title V permit.

Condition 85 of 8/6/1999 Permit addresses failure/ malfunction and associated reporting requirements. The condition has been streamlined out of the main portion of the Title V in favor of the standardized condition in the General Conditions section.

Conditions 83, 84, 88, 89 90 & 91 of the 8/6/1999 permit include: permit revocation, right of entry, permit invalidation, control of ownership changes, requests for information and a copy of the permit be maintained on premises. These conditions are streamlined out of the main portion

of the Title V Permit, as similar requirements are included under the General Conditions section of the permit.

40 CFR 60.48 requires records be maintained for two years. This is being streamlined out as the Title V regulation requires records be maintained for 5 years.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable by the applicant:

- Not Applicable, none identified

FUTURE APPLICABLE REQUIREMENTS

40 CFR Part 63 Subpart XXXX MACT requirements have been incorporated by reference into the permit. A facility wide MACT section has been placed in the Title V permit to address this issue. There are no other future applicable requirements identified at this time. Yokohama Tire Corporation will comply per the compliance schedule contained in 40 CFR Part 63 Subpart XXXX.

INAPPLICABLE REQUIREMENTS - NA.

COMPLIANCE PLAN - NA.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110. Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
	carbon black unloading	(9 VAC 5-80-720 B)	TSP, PM_{10}	
	oil & cement unloading	(9 VAC 5-80-720 B)	VOC	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
	Carbon black storage silos (6)	(9VAC 5-80-720 B)	TSP, PM_{10}	
	Testing laboratories (2)	(9VAC 5-80-720 A)	VOC	
	Parts cleaners	(9VAC 5-80-720 B)	VOC	
	Bead tippers, Bead Winders, Steelastic Machines, Stock Prep	(9VAC 5-80-720 B)	N.A.	
	Tire repair	(9VAC 5-80-720 B)	TSP, PM_{10}	
	Waste oil tank	(9VAC 5-80-720 B)	VOC	
	Napthenic oil tank	(9VAC 5-80-720 B)	VOC	
	High aromatic hydrocarbon tank	(9VAC 5-80-720 B)	VOC	
	Paraphenylene Diamines tank	(9VAC 5-80-720 B)	VOC	
	No. 2 fuel oil tank	(9VAC 5-80-720 B)	VOC	
	Napthenic oil tank	(9VAC 5-80-720 B)	VOC	
	High aromatic hydrocarbon tank	(9VAC 5-80-720 B)	VOC	
	No. 2 fuel oil tank	(9VAC 5-80-720 B)	VOC	
	No. 2 fuel oil tank	(9VAC 5-80-720 B)	VOC	
	Rubber solvent tank	(9VAC 5-80-720 B)	VOC	
	Compound batch Preparation area: Compound Syntrons, Mixers 1,3 ,5; multi-point weigh station; compound mixing area #1; Compound mixing area #2 & #3	(9VAC 5-80-720 B)	TSP, PM_{10}	
	Mold cleaning areas Nos. 1 & 2	(9VAC 5-80-720 B)	TSP, PM_{10}	
	Batch-off lines	(9VAC 5-80-720 B)	VOC, TSP, PM_{10}	
	Trimming operations	(9VAC 5-80-720 B)	TSP, PM_{10}	
	Gas/electric welding	(9VAC 5-80-720 A)	VOC, TSP, PM_{10}	
	Cutting/brazing units	(9VAC 5-80-720 A)	VOC, TSP, PM_{10}	
	Inks	(9VAC 5-80-720 B)	VOC	

[1]The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

- None Identified

PUBLIC PARTICIPATION

A public notice regarding the draft permit appeared in the September 8, 2002 edition of the Roanoke Times. Public comments were accepted through October 8, 2002. Only EPA commented.